Reviewer’s report

Title: Interest of pregnant women in the use of SMS (Short Message Service) text messages for the improvement of perinatal and postnatal care

Version: 1 Date: 26 May 2012

Reviewer: Samuel Anya

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Minor Essential Revisions

Background:

It would be helpful if the authors could be more specific about how they thought mobile phones would help to improve access to antenatal care and reduce maternal and perinatal mortality. The reference provided (Ref 5) indicates that the impact of mobile phones has not been demonstrated. The first sentence of discussion section of Ref 5 states that “Robust studies providing evidence on the impact of introducing mobile phones to improve the quality or increase the use of maternal health services are lacking.”

The wording used by the authors in the second sentence of paragraph 3 might be misinterpreted as suggesting that Ref 5 provides evidence of the positive impact of mobile phones. However, Ref 5 having already concluded that robust evidence of positive impact is lacking, goes on in the first sentence of fourth paragraph of the discussion to merely point out the possible uses of mobile phones - “…mobile phones can also be used to deliver mass health messages to pregnant women, recalling women with risk factors to present themselves at an antenatal clinic or referring women who suffer from complications such as fistula, incontinence and infertility.”

Mobile phones may be used in different ways so the background should focus on the use of mobile phones as explored in their study. From their discussion it appears their focus was on delivering text messages to pregnant women on their mobile phones. Therefore, the presentation about the real or potential effectiveness of mobile phones should relate to this form of use.

This clarity is important because if, for instance, sending text messages to mobile phones of pregnant women has been shown to have no impact, then the value of the study is undermined. On the other hand, the rationale for the study is strengthened if sending text messages has been shown to have a positive impact on access to antenatal care and maternal/perinatal mortality. If there is no data or conclusion about impact, this would also have an effect on the articulation of the rationale for the study.

Based on the foregoing, the section of the last paragraph of the discussion that contains references 12 to 22 would be better placed in the Background section of
the manuscript.

Methods:

It would be helpful to provide some clarifications.

1. Why were only two health institutions selected from a population of 1.5 million people while four health institutions were selected from a much smaller population of 40,000 people? For instance, were there only two community health centres/public hospitals in Rosario but four in Mercedes?

2. Why was having “previously given birth to a live fetus” an inclusion criterion?
   a. Did this not exclude potential beneficiaries if, as the authors suggested in the introduction, sending text messages reduces perinatal mortality which includes still births?
   b. It also excluded women in their first pregnancy who, arguably, have more information needs that could be addressed by sending them text messages.

3. What confidence level was used to calculate the sample size?

4. On what basis was the sample size allocated to the six different health facilities?

5. How were the women interviewed at each health facility selected for interview from all the women that attended the clinic on the day of the survey?

Results

1. It would be helpful to explain why more people sampled from Mercedes (the smaller population) compared to Rosari.

2. Paragraph 2: The distance to the health facilities was presented as time in minutes
   a. It would be helpful to state what this time refers to?
   b. If the time in minutes refers to travel time, then travel time rather than distance would be the preferable name of this variable.

3. Table 1-3:
   a. In all the tables, the upper limit of the middle range is presented as <xx, for instance 20 to <35 (Age, Table 1). The upper limits of the middle ranges should be changed to a specific number. The example given would then read as follows, 20 to 34. The middle ranges under Distance (Table 1) would read, 30 to 59 and 60 to 119.

Discussion:

1. The section of the last paragraph of the discussion that contains references 12 to 22 would be better placed in the Background section of the manuscript (see comments under Background above).

Conclusion:
1. The authors conclude that communication with pregnant women through their cell phones is feasible. However, the study examined acceptability rather than feasibility (which involves much more than pregnant women’s interest and acceptance of text messages and phone calls). This section should be modified to reflect this.

Discretionary Revisions:

1. Why was every pregnant woman asked about both the distance to the health centre and the distance to the hospital (Table 1)?
   a. As a measure of access, it would be clearer to see how much time the pregnant women spent to get to the health facility where they were interviewed.

Level of interest: An article whose findings are important to those with closely related research interests

Quality of written English: Acceptable

Statistical review: No, the manuscript does not need to be seen by a statistician.

Declaration of competing interests:

I declare that I have no competing interests